

KTL Test Report: 1R03473.1

Applicant: Angelcare Monitors Inc.
550 Chemin Du Golf
Suite 200
Nuns Island, Quebec
H3E 1A8

**Equipment Under Test:
(E.U.T.)** AC200, AC200R, AC201 & AC201R

FCC ID: N7TAC201TX

In Accordance With: **FCC Part 15, Subpart C, Paragraph 15.235**

Tested By: KTL Ottawa Inc.
3325 River Road, R.R. 5
Ottawa, Ontario K1V 1H2

Authorized By:

G. Westwell, Technologist

Date:

Total Number of Pages: 19

EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

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EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Section 1. Summary Of Test Results

General

All measurements are traceable to national standards.

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 15, Subpart C for low power devices. All tests were conducted using measurement procedure ANSI C63.4-1992. Radiated Emissions were made on an open area test site.

New Submission

Production Unit

Class II Permissive Change

Pre-Production Unit

| | | |
|---|---|---|
| D | X | X |
|---|---|---|

Equipment Code

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE.

See “ Summary of Test Data”.



NVLAP LAB CODE: 100351-0

TESTED BY: _____ DATE: _____
Russell Grant, Wireless Group Manager

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This report applies only to the items tested.

EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Summary Of Test Data

| Name Of Test | Para. No. | Result |
|-------------------------------|------------------|---------------|
| Powerline Conducted Emissions | 15.207 | Complies |
| Radiated Emissions | 15.235 | Complies |

EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Section 2. General Equipment Specification

Manufacturer: Angelcare Monitors Inc.

Date Received In Laboratory: January 16, 2001

KTL Identification No.: Items # 3, 6 & 9

Frequency Range: 49.83 – 49.89MHz

Operating Frequency(ies) of Sample: 49.83, 49.89MHz

Modulation: FM

Emission Designator: 9K00F3E

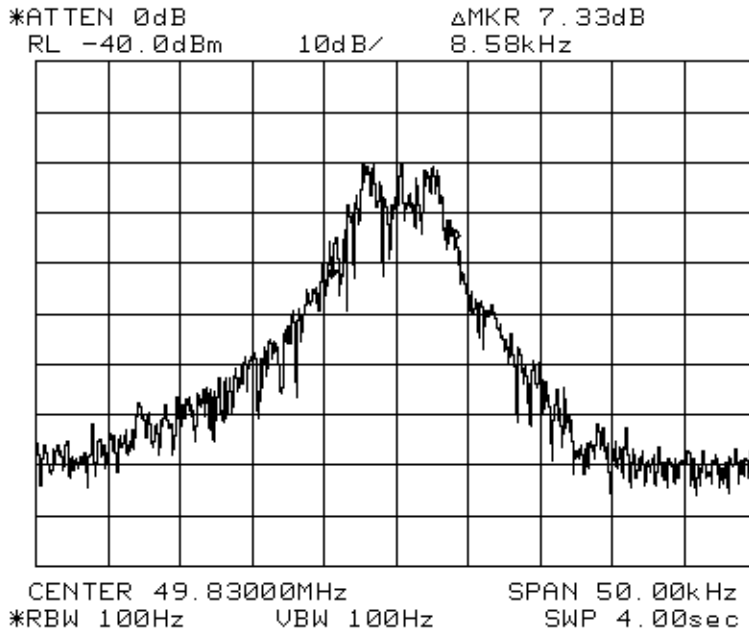
Primary Power: 120 VAC/Batteries

Integral Antenna **Yes** **No**

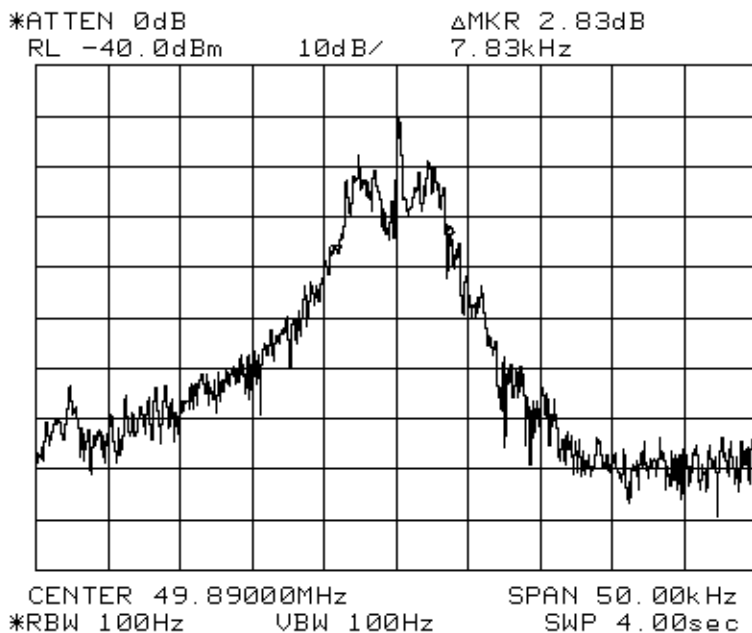
Model No.: AC200 – Sound Only
 AC200R – Sound Only And Rechargeable Batteries
 AC201 – Sound And Motion
 AC201R – Sound And Motion And Rechargeable Batteries

All models used identical transmitter circuits. Tests were conducted on Models AC200 and AC201R.

EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX



EQUIPMENT: AC200, AC200R, AC201 & AC201R
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EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Section 3. Powerline Conducted Emissions

Para. No.: 15.207

| | |
|---|---------------------------------------|
| Test Performed By: Russell Grant | Date of Test: January 17, 2001 |
|---|---------------------------------------|

Minimum Standard:

| Frequency (MHz) | Maximum Powerline Conducted RF Voltage | |
|--------------------|---|--------------|
| | (μ V) | (dB μ V) |
| 0.45 - 30.0 | 250 | 48 |

Test Results: Complies. See attached graph(s).

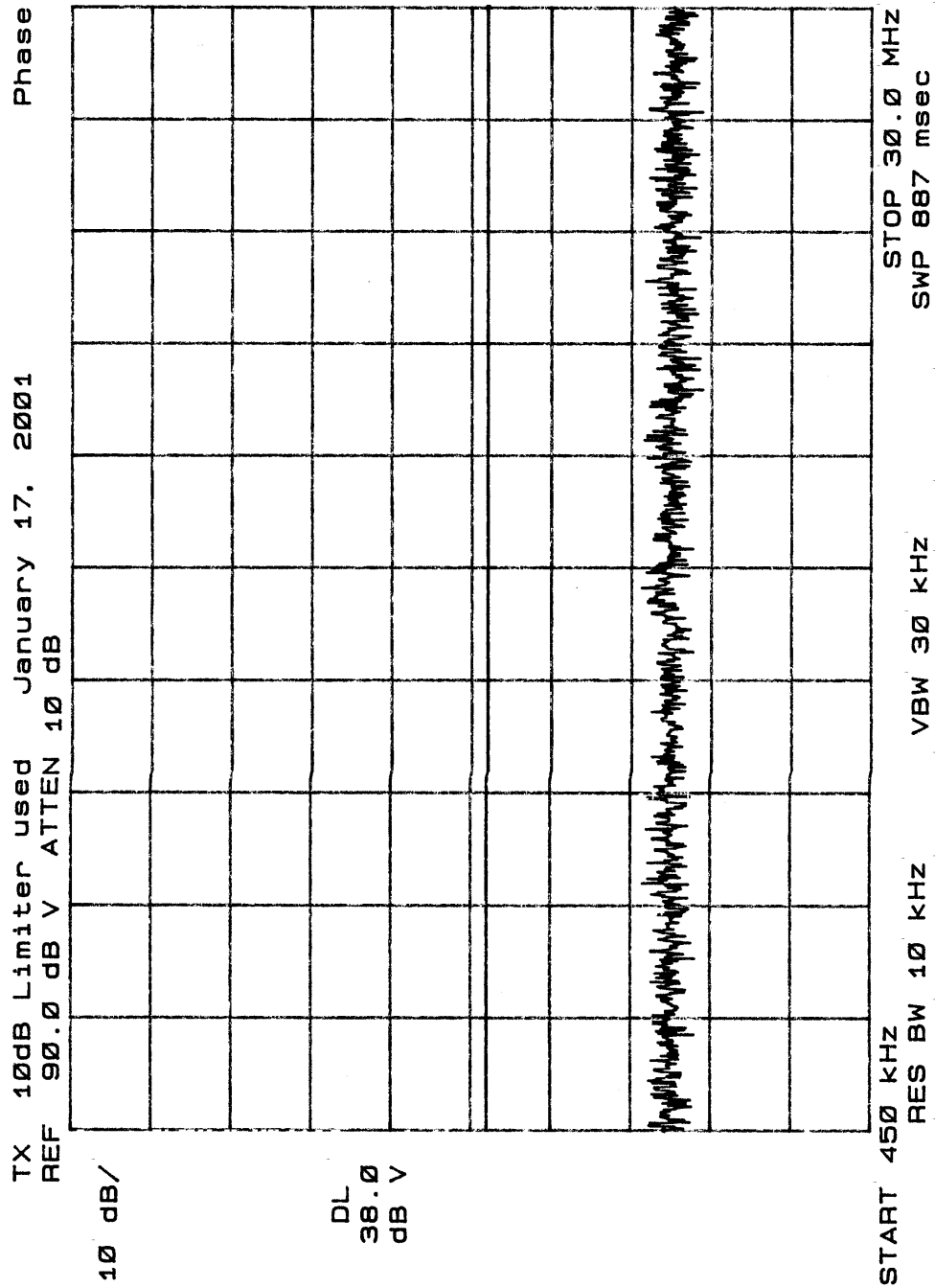
Measurement Data: See attached graph(s).

Method of Measurement: (Procedure ANSI C63.4-1992)

Measurements were made using a spectrum analyzer with 10 kHz RBW, Peak Detector. Any emissions that are close to the limit are measured using a test receiver with 10 kHz bandwidth, CISPR Quasi-Peak Detector.

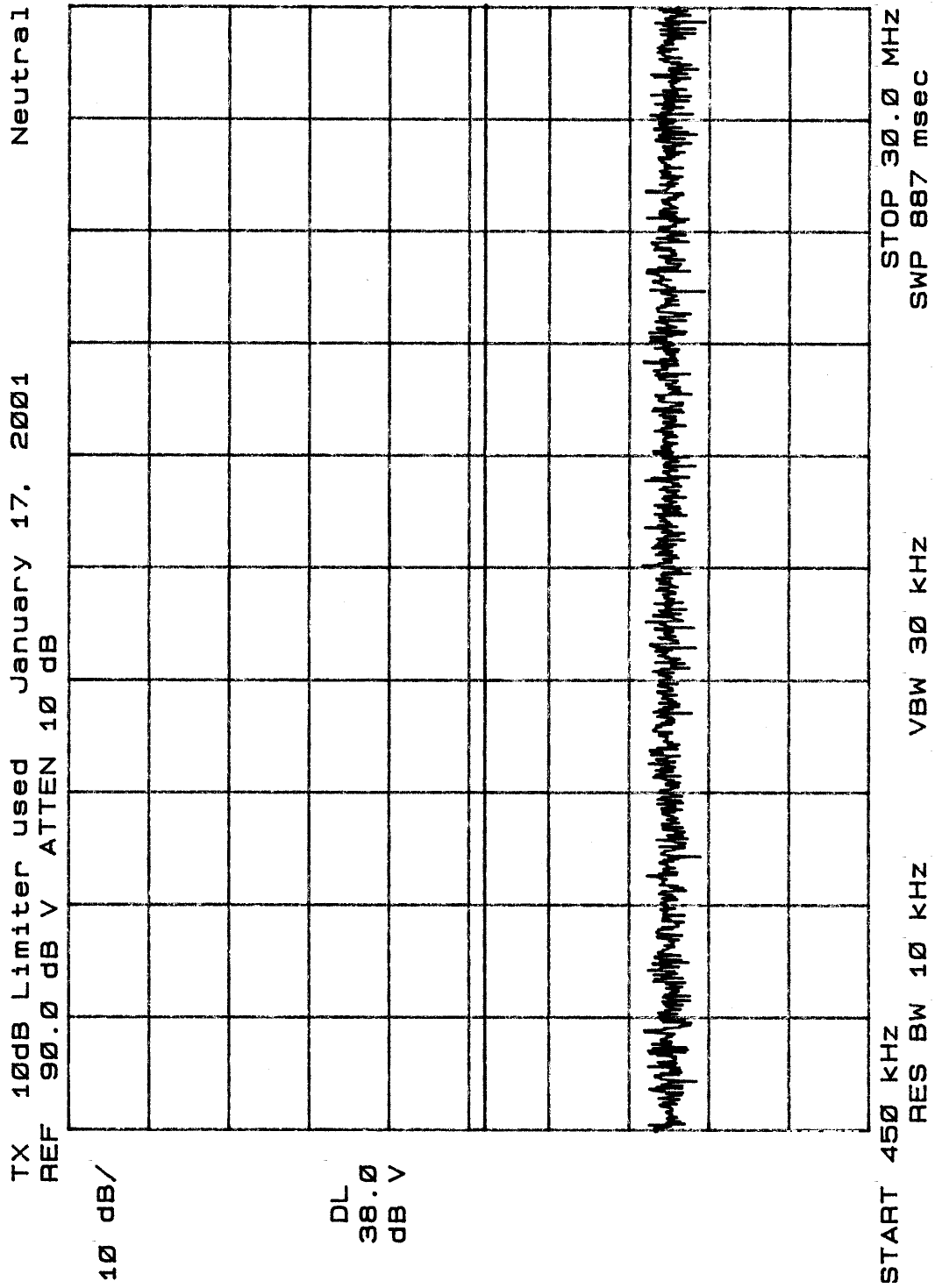
EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Model AC200



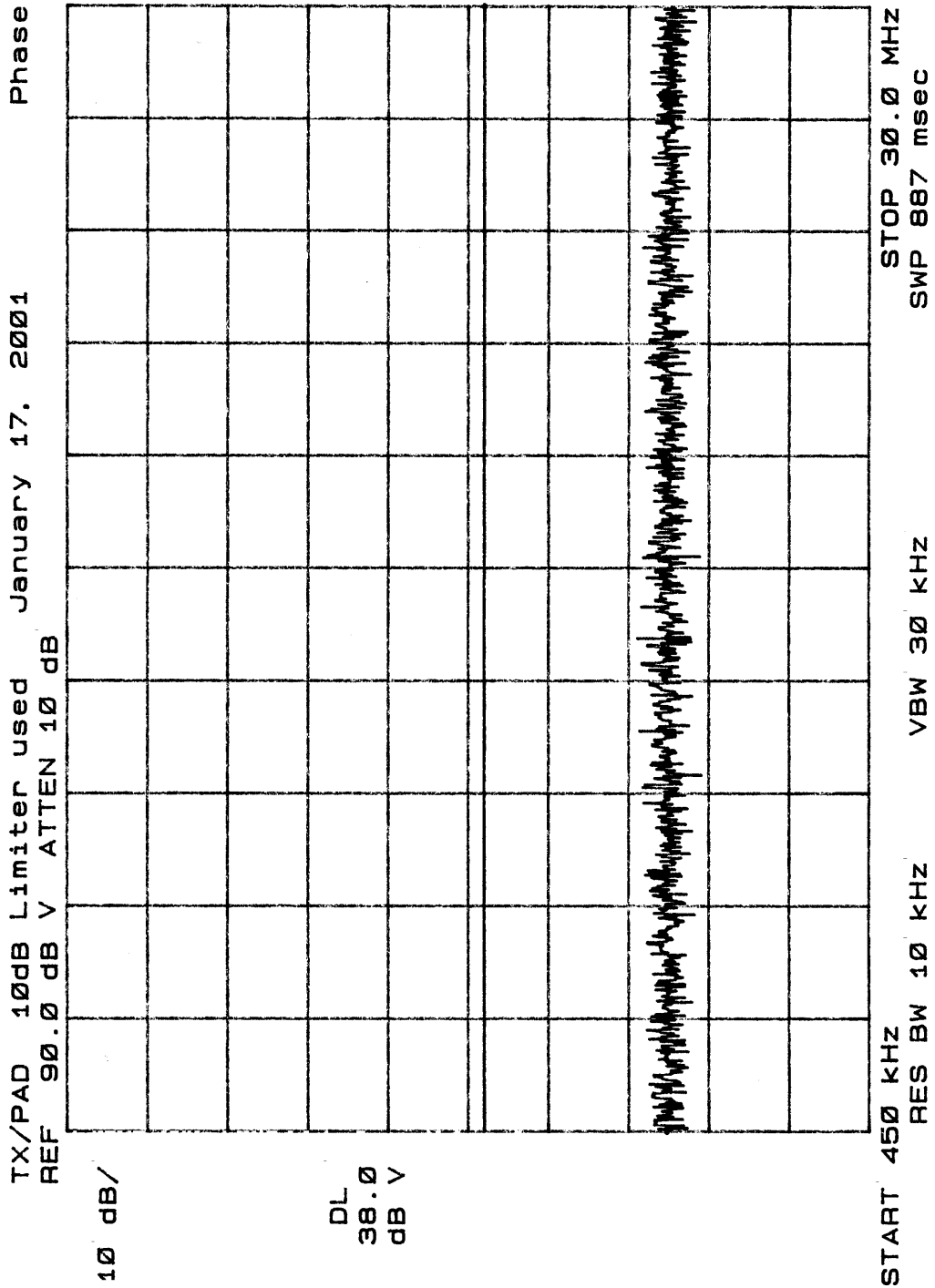
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FCC ID: N7TAC201TX

Model AC200



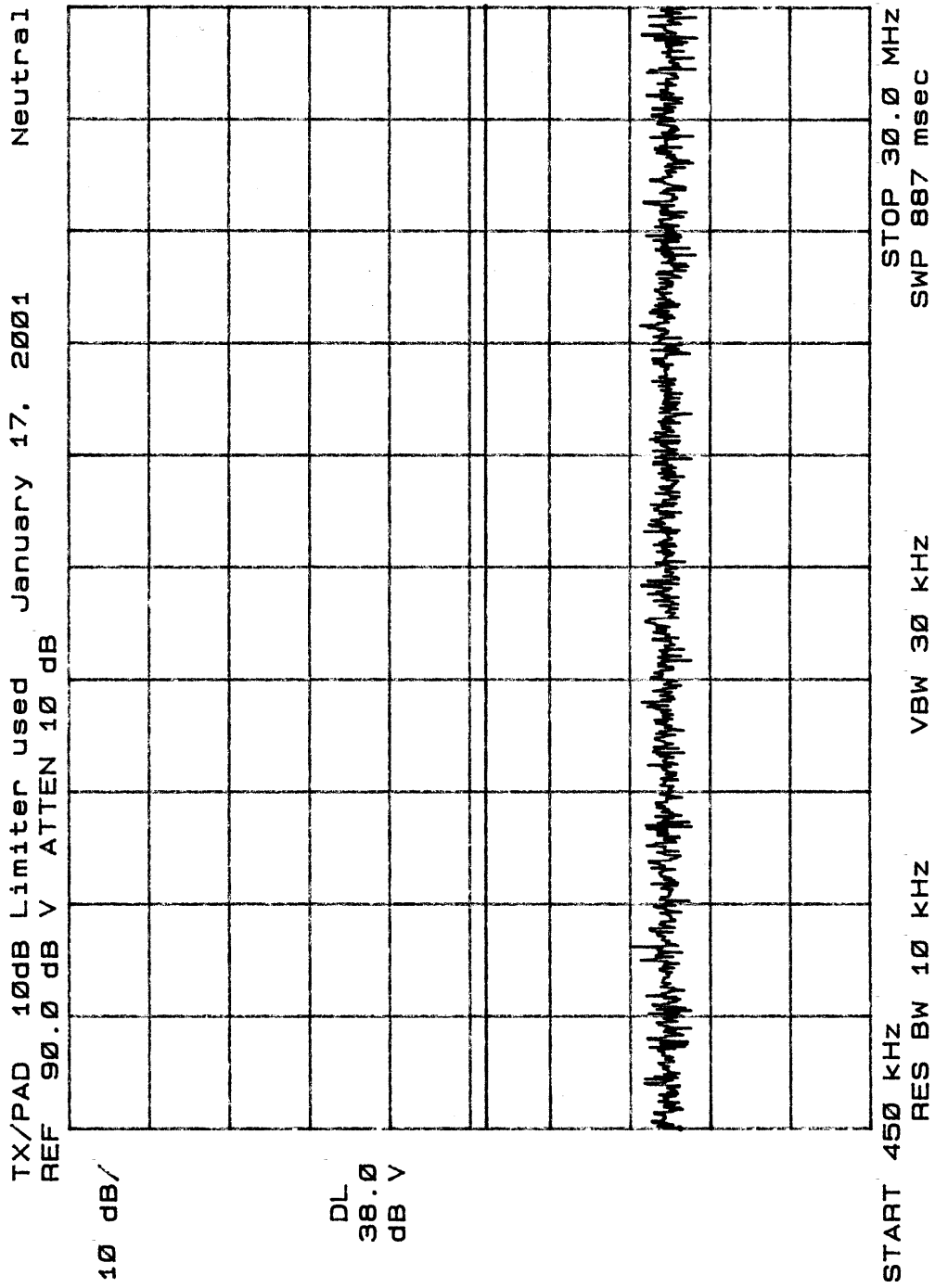
EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Model AC201R



EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Model AC201R



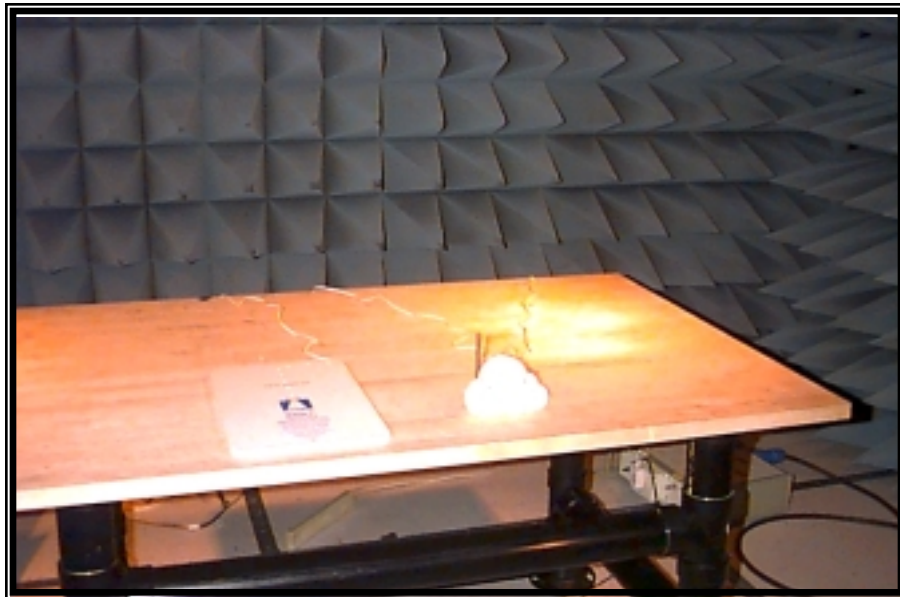
EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Conducted Photographs (Worst Case Configuration)

Front View Model AC200



Front View Model AC201R



EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Section 4. Radiated Emissions

Para. No.: 15.209

| | |
|---|---------------------------------------|
| Test Performed By: Russell Grant | Date of Test: January 17, 2001 |
|---|---------------------------------------|

Minimum Standard: The field strength of emissions from the device shall not exceed the following limits.

| Fundamental (MHz) | Field Strength (µV/m) | Field Strength (dBµV) |
|--------------------------|------------------------------|------------------------------|
| 49.82-49.90 | 10000 | 80 |
| 30 - 88 | 100 | 40.0 |
| 88 - 216 | 150 | 43.5 |
| 216 - 960 | 200 | 46.0 |
| Above 960 | 500 | 54.0 |

Test Results: Complies. The worst-case emission level is 75.4 dBµV/m @ 3m at 49.83 MHz. This is 4.6 dB below the specification limit.

Measurement Data: (Procedure ANSI C63.4-1992)

The spectrum was searched 30 to 1000MHz from and all emissions greater than 20µV/m @ 3m were measured and reported.

EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Test Data - Radiated Emissions: AC200 – Sound Only

| Test Distance (meters) : 3 | | Range: A Tower | | Receiver: ESVP | | RBW(kHz): 120 | | Detector: Peak | |
|-------------------------------|-----------|-------------------|----------------------------|--------------------------|-------------------------|------------------------|-------------------------------|-------------------|----------------|
| Freq. (MHz) | Ant. * | Pol. (V/H) | RCVD Signal (dBµV/m) | Ant. Factor (dB)** | Amp. Gain (dB)*** | Dist. Corr. (dB) | Field Strength (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
| 49.83 | B/C1 | V | 64.2 | 11.2 | | | 75.4 | 80.0 | 4.6* |
| 49.83 | B/C1 | H | 52.0 | 11.2 | | | 63.2 | 80.0 | 16.8 |
| 33.22 | B/C1 | V | 9.2 | 13.4 | | | 22.6 | 40.0 | 17.4 |
| 33.22 | B/C1 | H | 1.2 | 13.4 | | | 14.6 | 40.0 | 25.4 |

Notes:
 B/C = Biconical, B/L = Biconilog, L/P = Log-Periodic, H = Horn, D/P = Dipole
 * Re-measured using dipole antenna.
 ** Includes cable loss when amplifier is not used.
 *** Includes cable loss.
 () Denotes failing emission level.
 N.D. = Not Detected

**Test Data - Radiated Emissions: AC201R – Sound And Motion
 And Rechargeable Batteries**

| Test Distance (meters) : 3 | | Range: A Tower | | Receiver: ESVP | | RBW(kHz): 120 | | Detector: Peak | |
|-------------------------------|-----------|-------------------|----------------------------|--------------------------|-------------------------|------------------------|-------------------------------|-------------------|----------------|
| Freq. (MHz) | Ant. * | Pol. (V/H) | RCVD Signal (dBµV/m) | Ant. Factor (dB)** | Amp. Gain (dB)*** | Dist. Corr. (dB) | Field Strength (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
| 49.83 | B/C1 | V | 58.2 | 11.2 | | | 69.4 | 80.0 | 10.6 |
| 49.83 | B/C1 | H | 48.8 | 11.2 | | | 60.0 | 80.0 | 20.0 |
| 33.22 | B/C1 | V | 7.3 | 13.4 | | | 20.7 | 40.0 | 19.3 |
| 33.22 | B/C1 | H | 0.0 | 13.4 | | | 13.4 | 40.0 | 26.6 |
| 66.44 | B/C1 | V | 4.9 | 9.2 | | | 14.1 | 40.0 | 25.9 |
| 66.44 | B/C1 | H | 5.0 | 9.2 | | | 14.2 | 40.0 | 25.8 |

Notes:
 B/C = Biconical, B/L = Biconilog, L/P = Log-Periodic, H = Horn, D/P = Dipole
 * Re-measured using dipole antenna.
 ** Includes cable loss when amplifier is not used.
 *** Includes cable loss.
 () Denotes failing emission level.
 N.D. = Not Detected

EQUIPMENT: AC200, AC200R, AC201 & AC201R
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Radiated Photographs (Worst Case Configuration)

Front View Model AC200



Front View Model AC201R



EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Section 5. Test Equipment List

| CAL CYCLE | EQUIPMENT | MANUFACTURER | MODEL | SERIAL | LAST CAL. | NEXT CAL. |
|------------------|-----------------------------|---------------------|--------------|---------------|------------------|------------------|
| 1 Year | Spectrum Analyzer | Hewlett Packard | 8565E | FA000981 | June 16/00 | June 16/01 |
| 1 Year | Spectrum Analyzer-1 | Hewlett Packard | 8566B | 2311A02238 | Dec. 10/00 | Dec. 10/01 |
| 1 Year | Spectrum Analyzer Display-1 | Hewlett Packard | 8566B | 2314A04759 | Dec. 10/00 | Dec. 10/01 |
| 1 Year | LISN | EMCO | 4825/2 | 0002-1/47 | Feb. 14/00 | Feb. 14/01 |
| 1 Year | Biconical (1) Antenna | EMCO | 3109 | 9204-2708 | Aug. 10/00 | Aug. 10/01 |

NA: Not Applicable
NCR: No Cal Required
COU: CAL On Use

KTL Ottawa

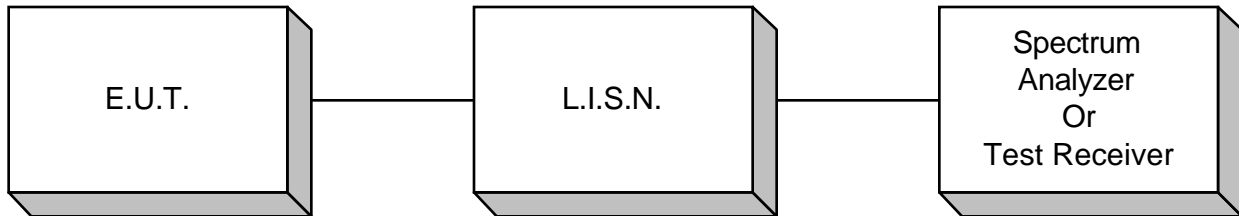
FCC PART 15, SUBPART C
PARAGRAPH 15.235
PROJECT NO.: 1R03473.1
ANNEX A

EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

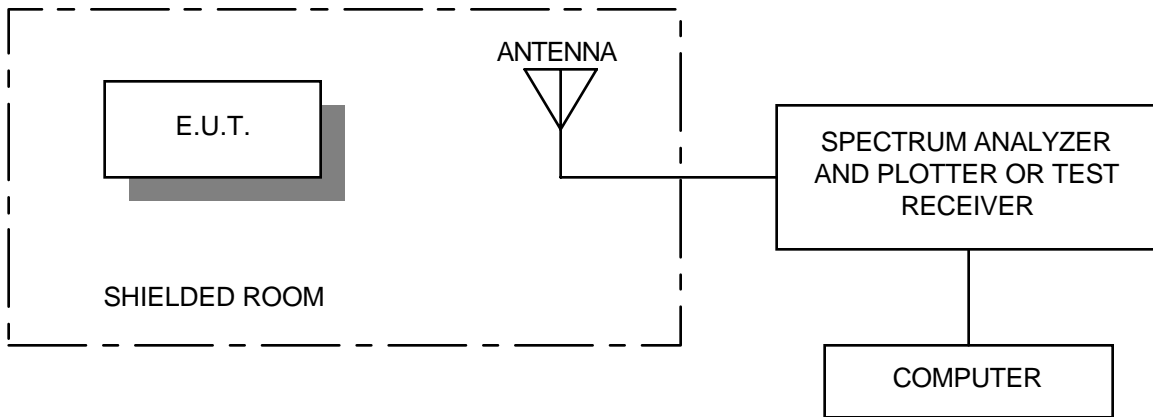
Annex A
Test Diagrams

EQUIPMENT: AC200, AC200R, AC201 & AC201R
FCC ID: N7TAC201TX

Conducted Emissions



Radiated Prescan



Test Site For Radiated Emissions

